

## II. AMENDMENTS TO THE CLAIMS

### CLAIMS:

1 – 32 (Cancelled).

33. (Currently Amended) A ~~treating~~ fluid composition comprising:

an effective amount of a zeolite selected from the group consisting of clinoptilolite, analcime, bikitaite, brewsterite, chabazite, faujasite, harmotome, heulandite, laumontite, mesolite, natrolite, paulingite, phillipsite, scolecite, stellerite, stilbite, and thomsonite such that the fluid composition has at least one spacer fluid activity selected from the group consisting of solids removal from a wellbore, fluid displacement from a wellbore and physical separation of chemically incompatible fluids in a wellbore;

a polymer selected from the group consisting of hydroxyethylcellulose, cellulose, carboxyethylcellulose, carboxymethylcellulose, carboxymethylhydroxyethylcellulose, hydroxypropylcellulose, methylhydroxypropylcellulose, methylcellulose, ethylcellulose, propylcellulose, ethylcarboxymethylcellulose, methylethylcellulose, hydroxypropylmethylcellulose, starch, guar gum, locust bean gum, tara, konjak, tamarind, karaya gum, welan gum, xanthan gum, galactomannan gums, succinoglycan gums, scleroglucan gums, tragacanth gum, arabic gum, ghatti gum, tamarind gum, carrageenan, carboxymethyl guar, hydroxypropyl guar, carboxymethylhydroxypropyl guar, polyacrylate, polymethacrylate, polyacrylamide, maleic anhydride, methylvinyl ether copolymers, polyvinyl alcohol, and polyvinylpyrrolidone; and

a carrier fluid.

34 – 39 (Cancelled).

40. (Currently Amended) The ~~treating~~ fluid composition of claim 33, wherein the zeolite is selected from the group consisting of analcime, chabazite, clinoptilolite, heulandite, and natrolite.

41. (Currently Amended) The ~~treating~~ fluid composition of claim 33, wherein the ~~treating~~ fluid composition is prepared by combining a dry mix and a carrier fluid, and wherein the dry mix comprises from about 5 to 90% by weight of the zeolite.
42. (Currently Amended) The ~~treating~~ fluid composition of claim 33, wherein the ~~treating~~ fluid composition is prepared by combining a dry mix and a carrier fluid, and wherein the dry mix comprises from about 60 to 70% by weight of the zeolite.
43. (Currently Amended) The ~~treating~~ fluid composition of claim 33, wherein the carrier fluid comprises a fluid selected from the group consisting of an aqueous fluid, hydrocarbon-based liquids, emulsions, acids and mixtures thereof.
44. (Currently Amended) The ~~treating~~ fluid composition of claim 43, wherein the carrier fluid comprises water.
45. (Currently Amended) The ~~treating~~ fluid composition of claim 33, wherein the ~~treating composition~~ carrier fluid comprises from about 45 to 95% by volume of the ~~earrier~~ fluid composition.
46. (Currently Amended) The ~~treating~~ fluid composition of claim 33, wherein the ~~treating composition~~ carrier fluid comprises from about 65 to 75% by volume of the ~~earrier~~ fluid composition.
47. (Currently Amended) The ~~treating~~ fluid composition of claim 33 further comprising an additive selected from the group consisting of diatomaceous earth and clay.
48. (Cancelled).

49. (Currently Amended) The ~~treating~~ fluid composition of claim 47 wherein the clay is selected from the group consisting of kaolinites, montmorillonite, bentonite, hydrous micas, attapulgite, sepiolite, and laponite.

50 – 52 (Cancelled).

53. (Currently Amended) The ~~treating~~ fluid composition of claim 33, wherein the polymer is selected from the group consisting of hydroxyethylcellulose, carboxymethylhydroxyethylcellulose and guar gum.

54. (Currently Amended) The ~~treating~~ fluid composition of claim 33, wherein the polymer comprises hydroxyethylcellulose.

55. (Currently Amended) The ~~treating~~ fluid composition of claim 33, wherein the polymer is selected from the group consisting of welan gum, xanthan gum, galactomannan gums, succinoglycan gums, scleroglucan gums, and cellulose and its derivatives.

56 – 57 (Cancelled).

58. (Currently Amended) The ~~treating~~ fluid composition of claim 33 further comprising a dispersant selected from the group consisting of sulfonated styrene maleic anhydride copolymer, sulfonated vinyltoluene maleic anhydride copolymer, sodium naphthalene sulfonate condensed with formaldehyde, sulfonated acetone condensed with formaldehyde, lignosulfonates and interpolymers of acrylic acid, allyloxybenzene sulfonate, allyl sulfonate and non-ionic monomers.

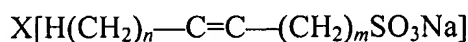
59 – 60 (Cancelled).

61. (Currently Amended) The ~~treating~~ fluid composition of claim 33, further comprising a surfactant selected from the group consisting of nonylphenol ethoxylates, alcohol ethoxylates,

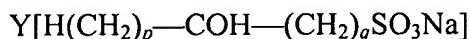
sugar lipids,  $\alpha$ -olefinsulfonates, alkylpolyglycosides, alcohol sulfates, salts of ethoxylated alcohol sulfates, alkyl amidopropyl dimethylamine oxides and alkene amidopropyl dimethylamine oxides.

62. (Currently Amended) The ~~treating~~ fluid composition of claim 61, wherein the surfactant is selected from the group consisting of:

- (a) a sodium salt of  $\alpha$ -olefinic sulfonic acid which is a mixture of compounds of the formulas:



and



wherein:

n and m are individually integers in the range of from about 6 to about 16;

p and q are individually integers in the range of from about 7 to about 17; and

X and Y are fractions with the sum of X and Y being 1;

- (b) a composition having the formula:

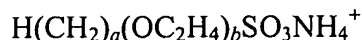


wherein:

a is an integer in the range of from about 6 to about 10;

- (c) oxyalkylated sulfonate;

- (d) an alcohol ether sulfonate sulfate of the formula:



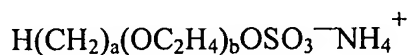
wherein:

a is an integer in the range of from about 6 to about 10; and

b is an integer in the range of from about 3 to about 10;

- (e) cocoamine betaine;

- (f) an ethoxylated alcohol ether sulfate of the formula:



wherein a is an integer in the range of from about 6 to about 10 and b is an integer in the range of from about 3 to about 10;

(g) an alkyl or alkene amidopropyl betaine having the formula:



wherein R is a radical selected from the group of decyl, cocoyl, lauryl, cetyl and oleyl;  
and

(h) an alkyl or alkene amidopropyl dimethylamine oxide surfactant having the formula:



wherein R is a radical selected from the group of decyl, cocoyl, lauryl, cetyl and oleyl.

63 – 64 (Cancelled).

65. (Currently Amended) The treating fluid composition of claim 33 further comprising a weighting material selected from the group consisting of barite, hematite, manganese tetraoxide, ilmenite and calcium carbonate.

66 – 105 (Cancelled).

106. (Currently Amended) A treating fluid composition comprising:

an effective amount of a zeolite selected from the group consisting of clinoptilolite, analcime, bikitaite, brewsterite, chabazite, faujasite, harmotome, heulandite, laumontite, mesolite, natrolite, paulingite, phillipsite, scolecite, stellerite, stilbite, and thomsonite such that the fluid composition has at least one spacer fluid activity selected from the group consisting of solids removal from a wellbore, fluid displacement from a wellbore and physical separation of chemically incompatible fluids in a wellbore;

a dispersant selected from the group consisting of sodium naphthalene sulfonate condensed with formaldehyde, sulfonated styrene maleic anhydride copolymer, sulfonated vinyltoluene maleic anhydride copolymer, sulfonated acetone condensed with formaldehyde,

lignosulfonates and interpolymers of acrylic acid, allyloxybenzene sulfonate, allyl sulfonate and non-ionic monomers; and  
a carrier fluid.

107 – 109 (Cancelled).

110. (Currently Amended) The ~~treating~~ fluid composition of claim 106, wherein the zeolite is selected from the group consisting of analcime, chabazite, clinoptilolite, heulandite, and natrolite.

111. (Currently Amended) The ~~treating~~ fluid composition of claim 106, wherein the ~~treating~~ fluid composition is prepared by combining a dry mix and a carrier fluid, and wherein the dry mix comprises from about 5 to 90% by weight of the zeolite.

112. (Currently Amended) The ~~treating~~ fluid composition of claim 106, wherein the ~~treating~~ fluid composition is prepared by combining a dry mix and a carrier fluid, and wherein the dry mix comprises from about 60 to 70% by weight of the zeolite.

113. (Currently Amended) The ~~treating~~ fluid composition of claim 106, wherein the carrier fluid comprises a fluid selected from the group consisting of an aqueous fluid, hydrocarbon-based liquids, emulsions, acids and mixtures thereof.

114. (Currently Amended) The ~~treating~~ fluid composition of claim 106, wherein the carrier fluid comprises water.

115. (Currently Amended) The ~~treating~~ fluid composition of claim 106, further comprising an additive selected from the group consisting of diatomaceous earth and clay.

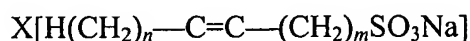
116. (Currently Amended) The treating fluid composition of claim 115 wherein the clay is selected from the group consisting of kaolinites, montmorillonite, bentonite, hydrous micas, attapulgite, sepiolite, and laponite.

117. (Currently Amended) The treating fluid composition of claim 106 further comprising a polymer selected from the group consisting of hydroxyethylcellulose, carboxymethylhydroxyethylcellulose, guar gum, welan gum, xanthan gum, galactomannan gums, succinoglycan gums, scleroglucan gums, and cellulose.

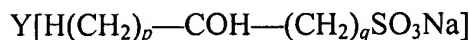
118. (Currently Amended) The treating fluid composition of claim 106 further comprising a surfactant selected from the group consisting of nonylphenol ethoxylates, alcohol ethoxylates, sugar lipids,  $\alpha$ -olefinsulfonates, alkylpolyglycosides, alcohol sulfates, salts of ethoxylated alcohol sulfates, alkyl amidopropyl dimethylamine oxides and alkene amidopropyl dimethylamine oxides.

119. (Currently Amended) The treating fluid composition of claim 118, wherein the surfactant is selected from the group consisting of:

- (a) a sodium salt of  $\alpha$ -olefinic sulfonic acid which is a mixture of compounds of the formulas:



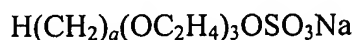
and



wherein:

- n and m are individually integers in the range of from about 6 to about 16;
- p and q are individually integers in the range of from about 7 to about 17; and
- X and Y are fractions with the sum of X and Y being 1;

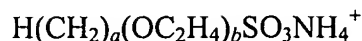
- (b) a composition having the formula:



wherein:

- a is an integer in the range of from about 6 to about 10;

- (c) oxyalkylated sulfonate;
- (d) an alcohol ether sulfonate sulfate of the formula:

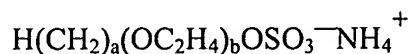


wherein:

a is an integer in the range of from about 6 to about 10; and

b is an integer in the range of from about 3 to about 10;

- (e) cocoamine betaine;
- (f) an ethoxylated alcohol ether sulfate of the formula:



wherein a is an integer in the range of from about 6 to about 10 and b is an integer in the range of from about 3 to about 10;

- (g) an alkyl or alkene amidopropyl betaine having the formula:



wherein R is a radical selected from the group of decyl, cocoyl, lauryl, cetyl and oleyl;  
and

- (h) an alkyl or alkene amidopropyl dimethylamine oxide surfactant having the formula:



wherein R is a radical selected from the group of decyl, cocoyl, lauryl, cetyl and oleyl.

120. (Currently Amended) The ~~treating~~ fluid composition of claim 106 further comprising a weighting material selected from the group consisting of barite, hematite, manganese tetraoxide, ilmenite and calcium carbonate.

121. (Currently Amended) A ~~treating~~ fluid composition comprising:

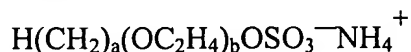
an effective amount of a zeolite selected from the group consisting of clinoptilolite, analcime, bikitaite, brewsterite, chabazite, faujasite, harmotome, heulandite, laumontite, mesolite, natrolite, paulingite, phillipsite, scolecite, stellerite, stilbite, and thomsonite such that the fluid composition has at least one spacer fluid activity selected from the group consisting of



solids removal from a wellbore, fluid displacement from a wellbore and physical separation of chemically incompatible fluids in a wellbore;

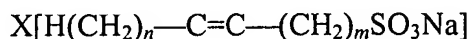
a surfactant selected from the group consisting of:

- (a) an ethoxylated alcohol ether sulfate of the formula:



wherein a is an integer in the range of from about 6 to about 10 and b is an integer in the range of from about 3 to about 10;

- (b) a sodium salt of  $\alpha$ -olefinic sulfonic acid which is a mixture of compounds of the formulas:



and



wherein:

n and m are individually integers in the range of from about 6 to about 16;

p and q are individually integers in the range of from about 7 to about 17; and

X and Y are fractions with the sum of X and Y being 1;

- (c) a composition having the formula:



wherein:

a is an integer in the range of from about 6 to about 10;

- (d) oxyalkylated sulfonate;

- (e) an alcohol ether sulfonate sulfate of the formula:



wherein:

a is an integer in the range of from about 6 to about 10; and

b is an integer in the range of from about 3 to about 10;

- (f) cocoamine betaine;

- (g) an alkyl or alkene amidopropyl betaine having the formula:



wherein R is a radical selected from the group of decyl, cocoyl, lauryl, cetyl and oleyl;  
and

(h) an alkyl or alkene amidopropyl dimethylamine oxide surfactant having the  
formula:



wherein R is a radical selected from the group of decyl, cocoyl, lauryl, cetyl and oleyl;  
and  
a carrier fluid.

122 – 124 (Cancelled).

125. (Currently Amended) The ~~treating~~ fluid composition of claim 121, wherein the zeolite is selected from the group consisting of analcime, chabazite, clinoptilolite, heulandite, and natrolite.

126. (Currently Amended) The ~~treating~~ fluid composition of claim 121, wherein the ~~treating~~ fluid composition is prepared by combining a dry mix and a carrier fluid, and wherein the dry mix comprises from about 5 to 90% by weight of the zeolite.

127. (Currently Amended) The ~~treating~~ fluid composition of claim 121, wherein the ~~treating~~ fluid composition is prepared by combining a dry mix and a carrier fluid, and wherein the dry mix comprises from about 60 to 70% by weight of the zeolite.

128. (Currently Amended) The ~~treating~~ fluid composition of claim 121, wherein the carrier fluid comprises a fluid selected from the group consisting of an aqueous fluid, hydrocarbon-based liquids, emulsions, acids and mixtures thereof.

129. (Currently Amended) The ~~treating~~ fluid composition of claim 121, wherein the carrier fluid comprises water.

130. (Currently Amended) The ~~treating~~ fluid composition of claim 121 further comprising an additive selected from the group consisting of diatomaceous earth and clay.

131. (Currently Amended) The ~~treating~~ fluid composition of claim 130 wherein the clay is selected from the group consisting of kaolinites, montmorillonite, bentonite, hydrous micas, attapulgite, sepiolite, and laponite.

132. (Currently Amended) The ~~treating~~ fluid composition of claim 121 further comprising a polymer selected from the group consisting of hydroxyethylcellulose, carboxymethylhydroxyethylcellulose, guar gum, welan gum, xanthan gum, galactomannan gums, succinoglycan gums, scleroglucan gums, and cellulose.

134. (Currently Amended) The ~~treating~~ fluid composition of claim 121 further comprising a weighting material selected from the group consisting of barite, hematite, manganese tetraoxide, ilmenite and calcium carbonate.

135. (NEW): The fluid composition of claim 33, wherein the fluid composition has a 300/3 ratio of from 2 to 6.

136. (NEW): The fluid composition of claim 106, wherein the fluid composition has a 300/3 ratio of from 2 to 6.

137. (NEW): The fluid composition of claim 121, wherein the fluid composition has a 300/3 ratio of from 2 to 6.